BY ORDER OF THE COMMANDER EDWARDS AIR FORCE BASE

EDWARDS AIR FORCE BASE INSTRUCTIONS 32-601

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Civil Engineering

WASTEWATER



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This publication implements Air Force Policy Directive 32-70, Environmental Quality, and Air Force Instruction 32-7041, Water Quality Compliance. This instruction establishes base policy and assigns responsibility for wastewater system oversight and operation and for accomplishing monitoring and reporting requirements of the Federal Water Pollution Control Act and associated publications/directives. It applies to domestic and nondomestic wastewater treatment and pretreatment systems, including but not limited to collection systems, trucked wastewater, lift stations, septic tanks, storm water treatment, industrial wastewater treatment, oil-water separators (OWS), grease traps, and leachate and groundwater treatment facilities. It applies to all dischargers and emphasizes eliminating, reducing and controlling nondomestic wastewater. Ensure that all records created as a result of processes prescribed in this publication are maintained in accordance with AFMAN 33-363, Management of Records, and disposed of in accordance with the Air Force Records Disposition Schedule (RDS) located at https://www.my.af.mil/gcss-af61a/afrims/afrims/. Refer recommended changes and questions about this publication to the Office of Primary Responsibility (OPR) using the AF IMT 847, Recommendation for Change of Publication; route AF IMT 847s from the field through the appropriate functional's chain of command. Air Force Personnel must ensure any information/records to be provided outside official DoD channels, including foreign nationals, must be released in accordance with the provisions of AFI 35-102, Security and Policy Review Process, and have the approval of the release authority. If a written request for DoD records has been made by an persons, organization, business, excluding a Federal Agency, that either explicitly or implicitly invokes the FOIA, it must be processed by the local FOIA Requester Service Center (412 CS/SCOK) in accordance with DoDR 5400.7-R_AFMAN-32-302, DoD Freedom of Information Act Program.

- **1. Purpose.** This instruction implements, AFPD 32-70, Environmental Quality, and AFI 32-7041, Water Quality Compliance, The emphasis on environmental pollution prevention and abatement requires all base activities, including housing occupants, contractors, and tenants who generate nondomestic wastewater, to review their processes that generate waste and their disposal procedures. Efforts must be taken to reduce or eliminate the pollutant at the point of generation, recycle or reuse the pollutant, treat the pollutant and control its discharge. An effective base program for eliminating, controlling and treating nondomestic wastewater requires the full support and cooperation of all activities that generate the wastewater. This instruction:
 - 1.1. Outlines a scoping process for identifying and characterizing waste from point sources on base and implementing a waste minimization, control and treatment program to reduce and prevent pollution.
 - 1.2. Prescribes segregation, control, treatment or pretreatment and discharge procedures for domestic and nondomestic wastewater.
 - 1.3. Outlines procedures for industrial discharge permitting, monitoring, testing and reporting to regulatory agencies.
 - 1.4. Designates OPRs for various tasks.

2. Policy

- 2.1. Comply with federal, state and local government requirements pertaining to permitting, management, treatment and discharge of wastewater. The above requirements take precedence if they conflict with this instruction. Assure timely review and submission of monitoring reports to regulatory agencies to avoid regulatory noncompliance.
- 2.2. Ensure and implement the best management practices for collection of wastewater and operation of wastewater treatment systems. Eliminate unpermitted discharges and cross-connections between wastewater and storm water collection systems.
- 2.3. Conduct wastewater characterization, toxicity reduction evaluations and other studies to determine the nondomestic pollutant characteristics and level of treatment needed.
- 2.4. Develop consistent base-wide approaches to nondomestic wastewater management that apply to all organizations at Edwards.
- 2.5. Enforce wastewater discharge policies through the use of point source monitoring, shop surveys, and administrative action to prevent treatment system interruptions and discharge violations. Compliance problems with nondomestic dischargers will be addressed and resolved at Environmental Protection Committee and Environmental Management Board meetings.
- 2.6. Utilize waste minimization, source reduction techniques, and wastewater pretreatment at or near the waste generation point to the extent needed to protect collection, treatment facilities, and processes from damage, upset, excessive cost or discharge violations, per SWPPP. Where feasible, source waste reduction through material substitution, process change and/or administrative change will be preferred over pretreatment.

2.7. All organizations must obtain permission for industrial wastewater discharge from the Base Civil Engineer (BCE), Bioenvironmental Engineering (BEE) and Environmental Management (EM).

3. Organizational Responsibilities

3.1. Civil Engineer Division

- 3.1.1. Is responsible for operations and maintenance of sewer lines, pretreatment and treatment facilities, pump stations, OWS and other associated facilities around the installation including taking timely and appropriate corrective actions when permit limits are exceeded.
- 3.1.2. Shares approval authority with BEE and EM for requests from organizations that generate nondomestic wastewater.
- 3.1.3. Reviews the wastewater constituents to determine if the discharge should be prohibited, require pretreatment or have other restrictions or controls prior to discharge to the collection system.
- 3.1.4. Contacts and notifies BEE and EM of all hazardous spills.

3.2. EM

- 3.2.1. Serves as point of contact for all official communications with the regulatory community.
- 3.2.2. Establishes and publishes technical policy and guidance through this instruction to base organizations for collection, treatment, storage and disposal of domestic and nondomestic waste. Establishes restrictions on what can be discharged and at what volumes and concentrations will be permitted.
- 3.2.3. Identifies and maintains a list of all nondomestic/industrial generators with discharge requirements by organization, discharge location and responsible point of contact/manager.
- 3.2.4. Jointly shares approval authority with BCE and BEE for requests from organizations that generate nondomestic wastewater, reviews the wastewater constituents to determine if the discharge should be prohibited, require pretreatment, or have other restrictions or controls prior to discharge to the collection system.
- 3.2.5. Assists all industrial wastewater generators to control or eliminate all nondomestic waste discharges to the sanitary sewer system.
- 3.2.6. Provides environmental awareness training for discharge point contacts/managers and refresher training as necessary. Training should address spill response, good housekeeping and material management practices.
- 3.2.7. Assures wastewater facilities are in compliance with regulatory and base requirements and works with BCE and BEE to develop corrective actions where needed.
- 3.2.8. Coordinates negotiations for discharge and pretreatment limits, monitoring locations and reporting requirements with regulators; maintains permit and reporting records.

3.2.9. Ensures compliance monitoring and reporting is conducted, reviewed and submitted in a timely manner.

3.3. BEE

- 3.3.1. Assists BCE and EM with required environmental monitoring and identification and characterization of nondomestic wastewater dischargers.
- 3.3.2. Continue to coordinate on Edwards industrial discharge permits.
- 3.3.3. Access health related concerns when releases or sewage spills.

3.4. Generating Activity

- 3.4.1. Controls all waste discharges, except sanitary wastes. The point manager's name, telephone number, area of responsibility and pollutants must be provided to the BCE, BEE and EM. Provide updates when any of the information changes, especially discharge characteristics.
- 3.4.2. Contacts the BCE, BEE, and EM for approval, guidance and nondomestic discharge restrictions prior to initiating any discharge. Where pretreatment is required, arrangements must be made clearly stating who will inspect, operate, maintain and do compliance monitoring at the pretreatment facility.
- 3.4.3. Prevents any nondomestic discharge not specifically approved by the BCE, BEE and EM. Takes a proactive approach to reducing the volume and concentration of discharges through the pollution prevention program by waste elimination, product substitution, recycling, process changes, and, when necessary, pretreatment.
- 3.4.4. Notifies the BCE, BEE and EM of any unpermitted spills or discharge of nondomestic waste.
- 3.4.5. Ensures that all personnel working in the generation area are aware of the discharge restrictions.

MICHAEL T. BREWER, Brigadier General, USAF Commander

GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

References

Terms and definitions used in this instruction are intended to be consistent with those defined in 40 Code of Federal Regulations (CFR) 122 through 136, 40 CFR 401 through 471, 40 CFR 501, Board Orders issued by the California Regional Water Quality Control and applicable state and local directives. Terms of interest in this instruction include the following:

Hazardous Waste Management Plan

Installation Restoration Plan (aka Management Action Plan)

Spill prevention Control and Countermeasure Plan

Non-Point Discharge and Stormwater Management Plan

Stormwater Pollution Prevention Plan (SWPPP) for Edwards AFB

Qualified Recycling Program

Prescribed Form

EDWARDSAFB FORM 5852, Permit for Industrial Waste Water Discharge Application

Abbreviations and Acronyms

AFFF—Aqueous Fire Fighting Foam

BCE—Base Civil Engineer

BEE—Bioenvironmental Engineering

CFR—Code of Federal Regulations

EM—Environmental Management

MSDS—Material Safety Data Sheet

OPR—Office of Primary Responsibility

OWS—Oil-Water Separators

SIC—Standard Industrial Classification

SWPPP—Stormwater Pollution Prevention Plan

WWTP—Wastewater Treatment Plant

Terms

Terms and definitions used in this instruction are intended to be consistent with those defined in 40 Code of Federal Regulations (CFR) 122 through 136, 40 CFR 401 through 471, 40 CFR 501, Board Orders issued by the California Regional Water Quality Control and applicable state and local directives. Terms of interest in this instruction include the following:

Categorical Standards—: National categorical pretreatment standards established for specific industrial activities.

Domestic wastewater—: Liquid wastes from the domestic laundry, food preparation, and sanitary facilities in housing, commercial, administrative buildings, industrial facilities and institutions.

Holding tank waste: Any waste from holding tanks such as vessels, chemical toilets, campers, trailers, septic tanks and vacuum—pump tank trucks.

Industrial user—: Any facility that discharges industrial wastes. They are classified according to the latest edition of the Standard Industrial Classification Manual, Office of Management and Budget of the Federal Government of the United States.

Industrial waste—: Any wastes resulting from the process employed in industrial, manufacturing, trade or business establishments as distinct from domestic wastes.

Interference—: The inhibition or disruption of the Wastewater Treatment Plant (WWTP) treatment processes or operations that contributes to the violation of a permit. This includes the prevention of the sewage sludge use.

National Pollutant Discharge Elimination System permits—: A permit issued pursuant to Section 402 of the act (33 United States Code 1342).

Nondomestic wastewater—: Any storm water and any wastewater other than that covered under the definition for domestic wastewater such as that resulting from industrial production, paint stripping, metal plating, maintenance and repair, aircraft and vehicle cleaning, power or heat plant operations, photographic processing, boiler and cooling water discharges and oil and solvent recovery operations.

Ordinance or code—: A means of regulating discharges to the WWTP collection system by permit, discharge limits or pretreatment requirements.

Pass—through: The presence in the treatment plant effluent of any pollutant that is not permitted to be discharged. This occurs when pollutants are sent to a WWTP that is not designed to remove them.

Pollutant—: Any substance, often regulated by environmental protection standards, that may have an adverse impact on the environment, such as the chemical and biological constituents of sewage, garbage, sewage sludge, chemical wastes, other biological materials, radioactive materials, heat, oil, grease, solvents, heavy metals, organic compounds, suspended solids, surfactants or any toxic or hazardous material discharged into water.

Pretreatment—: The reduction of the amount of pollutants, the elimination of pollutants, the alteration of the nature of pollutants, or the alteration of the nature of pollutant properties in wastewater to a less harmful state prior to or in lieu of discharging or otherwise introducing such pollutants into the WWTP. The reduction or alteration can be obtained by physical, chemical or biological processes or process changes or other means, except as prohibited by dilution (40 CFR 403.6(d)).

Pretreatment Standards: Standards established by the on—base or off-base regulators to control pollutant loading or concentrations entering the WWTP that may pass through or have adverse effects on the treatment process or contaminates sludges.

Sanitary sewer—: A sewer intended to receive primarily domestic sewage and some nondomestic as permitted by this instruction.

Storm Sewer or storm drain—: A sewer that carries storm or surface waters and drainage but excludes sewage and industrial wastes.

GENERAL RESTRICTIONS FOR ALL ACTIVITIES

- **A2.1.** No person will discharge or cause the discharge of any contaminated water except where prior approval for such discharge is given by the Base Civil Engineer (BCE), Environmental Management (EM) and Bioenvironmental Engineering (BEE). Any such approval may be revoked at any time.
- **A2.2.** The BCE, BEE and EM will, from time to time, establish quantitative or other limitations applicable to industrial waste discharges when it is necessary or to be in compliance with state or local law or Federal Instructions. Such limitations will apply at the industrial wastewater monitoring facility or station prior to mixing with domestic wastewaters. Wastewater discharge in excess of the limits established by the BCE, EM or any state law or applicable Federal Pretreatment Standards will constitute excessive concentrations or quantities prohibited by this instruction.
- **A2.3.** No person will discharge or cause to be discharged to the sewage systems, or to any sewer that directly or indirectly connects to the sewage systems any wastes which:
 - A2.3.1. May have an adverse or harmful effect on sewers, maintenance personnel, wastewater treatment plant personnel or equipment, treatment plant processes or the quality of treatment plant effluent or residue, public or private property, or wastes which may otherwise endanger the public, the environment, or create a public nuisance.
 - A2.3.2. Can adversely affect air quality, adversely affect water reclamation processes or the quality of reclaimed water, cause or contribute to a violation of any requirement of any facilities permit, any National Pollutant Discharge Elimination System Permit or Waste Discharge Requirements, or place the base in noncompliance with any of the statutory authorities listed in Title 40, Code of Federal Instructions, Part403.3(i), or place the base in noncompliance with any local, state or federal law including any air quality standard or instruction such as the New Source Performance Standards (set forth in Part 60, Chapter I, Title 40, Code of Federal Instructions), the National Emissions Standards for Hazardous Air Pollutants (set forth in Part 61, Chapter I, Title 40, Code of Federal Instructions), or any standard or instruction promulgated by the California Air Resources Board or the Kern County Air Quality Control Board.
 - A2.3.3. Will adversely impact the treatment plant process or degrade the wastewater to the point that it could not be treated and reclaimed.
- **A2.4.** Prohibited or restricted wastes described in this section will not be discharged, processed or stored in such a manner that such wastes could have access to the sewer. Any prohibited or restricted wastes that cannot otherwise be accounted for will be conclusively presumed to have been discharged to the sewer.
- **A2.5.** Dischargers will immediately notify BCE, BEE and EM of the accidental discharge of any prohibited waste, or of the discharge of excessive quantities or concentrations of any restricted waste. Dischargers will also notify BCE, BEE and EM of any circumstances which may potentially result in the discharge of a prohibited waste or of excessive quantities or concentrations of any restricted waste, including but not limited to any malfunction, upset, or

improper operation of the discharger's plant processes, pretreatment systems, or spill containment facilities, or any diversion or bypass of wastewater.

PROHIBITED AND RESTRICTED WASTE DISCHARGES

- **A3.1.** Unless approved by Base Civil Engineer (BCE), Environmental Management (EM) and Bioenvironmental Engineering (BEE), excessive discharges to the sewage system of the following are not permitted:
 - A3.1.1. Gasoline, benzene, naphtha, solvent, fuel oil, or any liquid, solid, or gas that would cause or tend to cause flammable or explosive conditions to result in the sewage system or that would exceed lower explosive limit or that would create such conditions in the sewage system.
 - A3.1.2. Toxic or poisonous solids, liquids, or gases in such quantities that, alone or in combination with other waste substances, may create a hazard for humans, animals, or the environment, interfere detrimentally with wastewater treatment processes, cause a public nuisance, or cause any hazardous condition to occur in the sewage system.
 - A3.1.3. Waste having a pH lower than 6.0 or having any corrosive or detrimental characteristic that may cause injury to wastewater treatment or maintenance personnel or may cause damage to structures, equipment or other physical facilities of the sewage system.
 - A3.1.4. Solids or viscous liquids of such size or in such quantity, condition or nature that they may cause obstruction to flow in the sewer or be detrimental to proper wastewater treatment plant operations. These objectionable substances tend to solidify in the sewer and obstruct wastewater flow.
 - A3.1.5. Rainwater, storm water, groundwater, street drainage, subsurface drainage, roof drainage, yard drainage, water from yard fountains, ponds or lawn sprays into the sanitary sewers.
 - A3.1.6. Water added for the purpose of diluting wastes which would otherwise exceed applicable maximum concentration limitations, except as approved in the wastewater discharge permit and as recommended by the Material Safety Data Sheet.
 - A3.1.7. Petroleum or mineral-based cutting oils, commonly called soluble oil and which form persistent water emulsions.
 - A3.1.8. Non-biodegradable oil, petroleum oil or refined petroleum products.
 - A3.1.9. Dispersed biodegradable oils, fats and greases such as lard, tallow or vegetable oil.
 - A3.1.10. Cyanide.
 - A3.1.11. Any wastes containing excessive quantities or concentrations of Biological Oxygen Demand, Chemical Oxygen Demand or other oxygen demanding substances.
 - A3.1.12. Mercaptans, phenols or any strongly odorous material or material tending to create odors.
 - A3.1.13. Dissolved sulfides above a concentration of 0.1 milligram/liter or wastes which contribute to excessive sulfide production.

- A3.1.14. Dissolved silica, dissolved aluminum or other substances including high pH material which cause encrustations, scale or precipitates on sewer walls or other similar adverse effects on the sewage system.
- A3.1.15. Waste having an excessively high temperature; any waste having a temperature of 140oF or higher, or which may cause the wastewater influent to a treatment plant to exceed 104oF.
- A3.1.16. Thiosulfate or any other waste constituent which requires treatment chemical dosage applications above levels normally used in the operation of the sewage systems.
- A3.1.17. Toxic organic, chlorinated hydrocarbon or organic phosphorus-type compounds.
- A3.1.18. Any waste containing substances that may precipitate, solidify, gel, polymerize or become viscous under conditions normally found in the sewage system.
- A3.1.19. Any waste producing or contributing to discoloration of wastewater or treatment plant effluent.
- A3.1.20. Garbage or waste, other than domestic wastewater, that is not ground sufficiently to pass through a 3/8-inch screen.
- A3.1.21. Iron, manganese, boron, chromium, phenols, plastic resins, copper, nickel, zinc, lead, mercury, cadmium, selenium, silver, arsenic or any other materials toxic to humans, animals, the environment or to biological or other wastewater treatment processes.
- A3.1.22. Any blow-down or bleed water from cooling towers or other evaporative coolers exceeding one-third of the makeup water.
- A3.1.23. Any single pass cooling or heating water.
- A3.1.24. Radioactive material wastes.
- A3.1.25. Detergents, surface active agents, or other substances, which may cause foaming in the sewage system.
- A3.1.26. Chlorides, fluorides, sulfates, borates or any other materials that can pass through treatment facilities and degrade water quality or limit reuse of the wastewater.
- A3.1.27. Ammonia from sources other than human wastes.
- A3.1.28. Benzene or other volatile organic compounds or any other waste constituent that alone or in combination with other materials adversely affects air quality or reduce the reuse potential of the treated wastewater.
- **A3.2.** Other Restrictions. The BCE, BEE and EM will establish quantitative limitations for dischargers which, because of their location, quantity or quality of discharge, can degrade the quality of waste water treatment plant effluent or residue or air quality to a level that prevents or inhibits efforts to reuse or dispose of the water or residue or causes any unusual operation or maintenance problems in the sewage system. The BCE, BEE and EM, in determining the unacceptability of specific wastes, will consider the nature of the waste and the adequacy and nature of the collection, treatment and disposal system available to accept the waste.

SPECIFIC DISCHARGE RESTRICTIONS FOR LISTED ACTIVITIES

- **A4.1.** The following is a list of nondomestic wastewater generators with appropriate restrictions and disposal methods:
 - A4.1.1. Aqueous Fire Fighting Foam (AFFF). Minor quantities of this product can apparently disrupt the operation of the sewage treatment process, by destroying the oxygen source and beneficial aquatic organisms. In general AFFF will not be permitted to enter the sanitary sewer system. Exceptions to this rule may be permitted by Base Civil Engineer (BCE), Environmental Management (EM) and Bioenvironmental Engineering (BEE), if the volume is sufficiently low and downstream dilution will render the AFFF relatively harmless or if benign formulations are utilized.
 - A4.1.2. Battery Shops. Slurry from spent battery acid will not be discharged into either the sanitary sewers or storm sewers. It will be properly containerized, labeled and disposed of through Hazardous Waste Storage Facility, in accordance with the base's Hazardous Waste Management Plan and the Resource Conservation and Recovery Act. The following facility maintains batteries: Facility Number 1600, 412th Test Wing Maintenance Shop.

A4.1.3. Civil Engineer Division

- A4.1.3.1. Power Production and Mechanical Shops (boilers and air conditioning systems). Waste oil generated will be collected and recycled. Waste ethylene glycol may not be disposed into the sanitary sewer system.
- A4.1.3.2. Heating, ventilation and air conditioning systems do generate wastewater from: boiler blow down, cooling tower, chilled water piping systems and heating hot water systems. The types and quantities of chemicals used for treating these mechanical systems will be periodically reviewed. Discharging these chemicals will be in compliance with their Material Safety Data Sheet (MSDS).
- A4.1.3.3. The quantity of the bleed off and overflows from cooling towers and evaporative coolers effect the sewage collection and treatment systems, as well as water resources. Efficient operation including electrical conductivity monitoring of cooling tower water will reduce the waste to a minimum. Evaporative cooler drains and bleed off flow rate will be periodically checked and adjusted to minimize the waste, while still preventing mineralization fouling of the evaporative media. These duties will be part of the routine operation and maintenance of the equipment item.
- A4.1.4. Contaminated Storm Water/Groundwater from Fueling Facilities. Rainwater or groundwater contaminated with petroleum products cannot be discharged into sanitary or storm sewers. The contaminated waters will be pretreated prior to discharge. The treated clear wastewater discharged from oil/water separators and emergency holding basins can only be permitted after testing, reviewed and approved by both EM and BEE. The following facilities are included in this category:

Facility Number 130, Jet Fuel Storage

Facility Number 182, Motor Vehicle Fuel Dispensing Area at Hangar 182

Facility Number 1422, Truck Fill Stand

Facility Number 1734, Truck Fill Stand

Facility Number 1873, Jet Fuel Storage and Dispensing

Facility Number 2560, Jet Fuel Storage

Facility Number 3807, Jet Fuel Storage and Dispensing

Facility Number 4511, Jet Fuel Storage and Dispensing

Facility Number 4927, Jet Fuel Storage

Facility Number 4928, Jet Fuel Storage

Facility Number 4934, Jet Fuel Storage

Facility Number 4935, Jet Fuel Storage

Facility Number 4936, Jet Fuel Storage

A4.1.5. Engine Maintenance. Wastewater from jet engine disassembly, inspection and reassembly will be collected and pretreated prior to discharge to the sanitary sewage system. Hazardous solvents including Tetrachloroethylene are not permitted to enter the sanitary sewage systems, unless concentrations are reduced to acceptable levels established by federal and state law and as directed by EM. Concentrated solvents will be collected and recycled, as much as possible. Non-hazardous cleaning solvents, which have passed through a properly designed and maintained pretreatment process, can be discharged to the sanitary sewage system. None of this waste may be discharged to the storm water system. These limitations apply to the following facilities:

Facility Number 3800, Jet Engine Maintenance New Main base Jet Engine Maintenance Facility Facility Number 160, Jet Engine Inspection and Maintenance Shop

- A4.1.6. Facility Number 1608, 412th Test Wing Nondestruct Inspection Facility. Discharges of dye penetrant will not exceed the recommended levels identified in the manufacturer's MSDS. The MSDS will be the basis for determining pretreatment requirements.
- A4.1.7. Maintenance Hangars: Hydraulic oil, jet fuel, and cleaning solvents will be collected and recycled. Spray paints will be disposed through Edwards Air Force Base Hazardous Waste Disposal Facility, using properly regulated procedures. The existing floor drains provide emergency protection for fire water overflows and will not be used for the disposal of any hazardous waste. Floor drains, sumps and oil-water separators will be periodically inspected to determine if illicit discharges have occurred. If illicit discharges directly to the storm sewage system occur, an investigation to determine the types and quantities released will be done, in order to develop a clean up plan. The following facilities are in this category:

Hangar Number 1207

Hangar Number 1210

Hangar Number 1600

Facility Number 1622

Hangar Number 1623

Hangar Number 1635

Hangar Number 1864

Hangar Number 1870

Hangar Number 1874 Hangar Number 1881

- A4.1.8. Medical and Infectious Waste. Infectious wastes will be rendered noninfectious prior to discharge if deemed to pose a threat to public health and safety. No person will discharge solid wastes from hospitals, clinics, medical laboratories or other medical facilities to the sewage system including, but not limited to, hypodermic needles, syringes, instruments, utensils or other paper and plastic items of a disposable nature, or recognizable portions of the human anatomy or laboratory animals, except where prior written approval for such discharges is given by the BCE, BEE and EM.
- A4.1.9. Pest Management Shop. Pesticides and related pesticide wastes will not be discharged into the sanitary sewers at any time. This material will be reused or disposed of through AFTC/EMCO in accordance with the base's Hazardous Waste Management Plan and Code of Federal Instructions, Title 40, Section 165 (40 CFR 165).
- A4.1.10. Septage. Concentrated sewage from septic tanks and chemical toilets can be discharged to the domestic wastewater treatment plant. There is essentially unresticted discharge of domestic septage from on base septic tanks, except the flow rate can not overload the treatment plant and the septic tank can not be connected to an industrial waste drain. Since chemical toilet wastes contain biocides including formaldehyde, these waste will need permit authority. The concentrations and types of biocides will have to be identified along with the contractor's permit application. The MSDS for all proposed biocides must be submitted along with permit application.
- A4.1.11. Washing Activities. Rinsewater from the following activities can discharge to the sanitary sewer system via a properly maintained and functional gravity OWS, provided the rinsewater does not contain solvents or fuel.

Aircraft wash activities

Aircraft ground equipment washing activities

POL vehicles and equipment washing activities including:

Facility Number 1435, 412th Test Wing Vehicle Maintenance Shop

Facility Number 1617, Fire Station Number One

Facility Number 1866

Facility Number 2110, Army Air Force Exchange Services Gas Station

Facility Number 2450, Services Automotive Hobby Shop

Facility Number 3510, Vehicle Maintenance Shop

Facility Number 5560, Fire Station Number Two

PERMIT FOR INDUSTRIAL WASTE WATER DISCHARGE APPLICATION (EDWARDSAFB FORM 5852)

Figure A5.1. Permit For Industrial Waste Water Discharge Application

In consideration of the granting of a wastewater discharge permit, the applicant agrees:

- 1. To furnish any additional information on industrial wastewater discharges as required.
- 2. To accept and abide by all provisions of Edward Air Force Base Instruction 32-6.
- 3. To operate and maintain any required industrial wastewater treatment devices in a satisfactory, approved manner.
- 4. To cooperate at all times with Environmental Management (EM), Bioenvironmental Engineering (BEE) and Civil Engineer Division personnel, or their representatives, in the inspection, sampling and study of industrial wastewater facilities and discharges.
- 5. To immediately notify BEE and EM in the event of any accident, negligence or other occurrence that causes the discharge to the sewer of any material whose nature and quantity might be reasonably judged to constitute a hazard to the public health, environment, personnel or wastewater treatment facilities.
- 6. To submit, as required, accurate data on industrial wastewater discharge flows and wastewater constituents.
- 7. To operate only <u>one</u> industrial wastewater discharge point to the sewage system under the authority granted by this permit.
- 8. To submit additional pages as required to furnish the necessary information if there is inadequate room on the reverse side of the permit form to complete submittal of requested data.
- 9. To apply for a revised Industrial Wastewater Discharge Permit if any change in industrial processes, method of wastewater treatment or operations creates a significant change in industrial wastewater quality or if the quantity of wastewater discharged changes by more than 25% or other threshold level as specified in industrial waste permit requirements.
- 10. To provide immediate access to authorized personnel to any facility directly or indirectly connected to the sewage system under emergency conditions and at all other reasonable times.
- 11. The discharger will amend the wastewater discharge permit whenever there is a change in construction, operation, or maintenance which may affect the discharge of pollutants to the sanitary sewer or the base's storm drainage system.

Figure A5.2. Line by Line Instructions for Completing the Permit Application, EDWARDSAFB FORM 5852

Line 1: Sewer Connection Category. Check the appropriate category. Please indicate whether the proposed discharge is to an existing sewer connection or if a new industrial wastewater connection is required.

Line 2: Applicant. The legal name of the company or Department of Defense Office Symbols responsible for the wastewater to be discharged must be indicated on line 2. The contractor, plumber, or consultant must not be listed.

Line 3: Facility Number.

Lines 4 and 5: Address and Point of Discharge. The mailing address of the applicant should be provided on line 4. On line 5, specify the point of connection to the sewer or storm drain by using distance from nearest street intersection, or any other means of identification.

Line 6: General Description of Type of Industry. Give a general description of the type of business the applicant operates. The Federal Standard Industrial Classification (SIC) Number(s) must be provided. This number is obtained from the Federal SIC Manual. Air Force Facilities are listed by Category Codes. This number is obtained from 412 TW/CEAO, Real Estate Management Branch.

Lines 7: Raw Materials Used. Provide a brief description of the types and quantities of the major raw materials used at the facility and of the wastewater produced on line 7

- **Line 8: Wastewater Producing Operation.** On line 8 give a full and detailed description of the operations which generate the wastewater to be discharged. A more complete and comprehensive description of the raw materials produced, products and process operations may need to be submitted as additional information in an accompanying letter. Provide:
- a) A description of potential sources which may be expected to add significant quantities of pollutants to sanitary or storm water discharges. Specific material handling procedures, storage requirements, and clean-up equipment and procedures should be identified, as appropriate. Internal reporting, as well as coordination with other activities including Base Civil Engineer (BCE), Environmental Management (EM) and Bioenvironmental Engineering (BEE), for spills of significant materials shall be established.
- b) A narrative of existing and non-structural control measures (if any) to reduce pollutants to the sanitary and storm drainage systems.
- c) The type, capacity, condition, etc. of any existing or proposed industrial wastewater treatment facilities (if any).
- d) Methods of on-site storage and disposal of significant materials.
- e) Outdoor storage, manufacturing, and processing activities including activities that generate

significant quantities of dust or particles.

- f) The sewage and storm water management controls appropriate for the facility. The selected controls shall reflect identified potential sources of pollutants at the facility.
- **Line 9: Time of Discharge.** Indicate the appropriate time and days of the proposed wastewater discharge. If the time and days of wastewater discharge do not coincide with the working hours, this must be discussed in an accompanying letter.
- **Line 10:** Wastewater Flow Rate. Provide the average industrial wastewater flow rate in gallons per day for existing facilities. The peak flow rate (in gallons per minute) must also be provided on line 10. This is the rate at which wastewater is discharged to the sewer system during the single highest 30-minute discharge period. Estimates will be acceptable for new facilities only.
- Line 11: Constituents of Wastewater Discharge. Give a general description of the materials or chemicals which may be present in the industrial wastewater discharge. For existing facilities, a chemical analysis of the wastewater by a certified laboratory must be furnished. Such analyses must include values for chemical oxygen demand, suspended solids, pH, and any other chemicals associated with the raw materials used at the facility. New organizations which are not yet generating wastewater must submit estimates for these parameters. Provide a list of pollutants that are likely to be present in storm water discharge in significant quantities, and an estimate of the peak and annual quantities of these pollutants. List significant spills including toxic chemical (listed in 40 CFR Part 372 and 40 CFR Part 110, 117 or 302 for oil or hazardous substances or Board Order limits) that have been discharged as reported on United States Environmental Protection Agency Form R.
- Line 12: Industrial Wastewater Contact. Print the name, position and telephone number of an official who has working knowledge of the operations producing the wastewater, is responsible for the industrial wastewater discharge and may be contacted for further information. If someone other than the individual listed on line 12 is to be the contact person for permit processing purposes, such as a contractor, plumber or consultant, the permit processing contact person should be specified in an accompanying letter. Identify specific individuals (and job title) that are responsible for developing, implementing, and revising the storm water pollution prevention plan. Identify specific individual(s) responsible for preventative maintenance including inspection and testing of equipment and systems that could fail and result in discharge of pollutants to the sewage or storm water systems.
- **Lines 13 to 15: Signatures.** This permit application form must be signed and dated by an administrative officer. The signature of a contractor, plumber, or consultant will not be acceptable
- **Lines 14 and 15: Approval Signatures**. The signatures of BCE, BEE and EM are required to establish a valid Industrial Wastewater Discharge Permit.